WHAT IS CLAIMED IS:

1. An overlay image processing device for generating an overlay image signal composed of an n number of superimposed image signals, n being an integer greater than 1, the overlay image processing device comprising:

an image selector configured to select from among an m number of image signals one reference image signal and (n-1) number of superimposing image signals, m being an integer greater than 2;

a resolution converter configured to convert resolutions of the n number of selected image signals including the reference image signal and the (n-1) number of superimposing image signals into respective desired resolutions; and

an image synthesizer configured to superimpose the (n-1) number of converted superimposing image signals on the converted reference signal.

2. An overlay image processing device according to claim 1 wherein at least one of the m number of image signals is a display signal output from a personal computer.

3. An overlay image processing device according to claim 1 wherein the image selector selects the reference image signal and the (n-1) number of superimposing image signals according to an arbitrary predetermined order of superposition for the n number of image signals; and

the image synthesizer superimposes the (n-1) number of converted superimposing image signals on the converted reference image signal according to the order of superposition.

4. An overlay image processing device according to claim 1 further comprising a scan converter that, in the event that at least one of the n

number of image signals selected by the image selector is an interlaced image signal, coverts the at least one interlaced image signal into a non-interlaced image signal.

5. An overlay image processing device according to claim 1 wherein the image synthesizer has the *n* number of 2-input image synthesizers, each 2-input image synthesizer being configured to receives upper-side and lower-side image signals and superimpose the upper-side image signal on the lower-side image signal;

the *n* number of 2-input image synthesizers being connected in series in multistage fashion such that the 2-input image synthesizer of a first stage uses the reference image signal as the lower-side image signal and a first superimposing image signal as the upper-side image signal, while the 2-input image synthesizer of i^{th} stage, where *i* is between 2 and *n*, inclusive, uses an output of the 2-input image synthesizer of $(i\text{-}1)^{th}$ stage as the lower-side image signal and i^{th} superimposing image signal as the upper-side image signal.

6. An overlay image display device for displaying an overlay image composed of an *n* number of superimposed images, *n* being an integer greater than 1, the overlay image display device comprising:

an overlay image processing device for generating an overlay image signal composed of the *n* number of superimposed image signals; and

an image display device for displaying an image represented by the overlay image signal;

the overlay image processing device includes:

an image selector configured to select from among an *m* number of image signals one reference image signal and (*n*-1) number of superimposing image signals, *m* being an integer greater than 2;

a resolution converter configured to convert resolutions of the

n number of selected image signals including the reference image signal and the (*n*-1) number of superimposing image signals into respective desired resolutions; and

an image synthesizer configured to superimpose the (*n*-1) number of converted superimposing image signals on the converted reference signal.

7. An overlay image display device according to claim 6 wherein at least one of the *m* number of image signals is a display signal output from a personal computer.

8 An overlay image display device according to claim 6 wherein the image selector selects the reference image signal and the (*n*-1) number of superimposing image signals according to an arbitrary predetermined order of superposition for the *n* number of image signals; and

the image synthesizer superimposes the (*n*-1) number of converted superimposing image signals on the converted reference image signal according to the order of superposition.

9. An overlay image display device according to claim 6 further comprising a scan converter that, in the event that at least one of the *n* number of image signals selected by the image selector is an interlaced image signal, coverts the at least one interlaced image signal into a non-interlaced image signal.

10. An overlay image display device according to claim 6 wherein the image synthesizer has the *n* number of 2-input image synthesizers, each 2-input image synthesizer being configured to receives upper-side and lower-side image signals and superimpose the upper-side image signal on the lower-side image signal;

the n number of 2-input image synthesizers being connected in series in multistage fashion such that the 2-input image synthesizer of a first stage uses the reference image signal as the lower-side image signal and a first superimposing image signal as the upper-side image signal, while the 2-input image synthesizer of i^{th} stage, where i is between 2 and n, inclusive, uses an output of the 2-input image synthesizer of $(i\text{-}1)^{th}$ stage as the lower-side image signal and i^{th} superimposing image signal as the upper-side image signal.

11. A method of generating an overlay image signal composed of an n number of superimposed image signals, n being an integer greater than 1, the method comprising the steps of:

(a) selecting from among an m number of image signals one reference image signal and $(n\text{-}1)$ number of superimposing image signals, m being an integer greater than 2;

(b) converting resolutions of the n number of selected image signals including the reference image signal and the $(n\text{-}1)$ number of superimposing image signals into respective desired resolutions; and

(c) superimposing the $(n\text{-}1)$ number of converted superimposing image signals on the converted reference signal.

12. A method according to claim 11 wherein at least one of the m number of image signals is a display signal output from a personal computer.

13. A method according to claim 11 wherein the step (a) includes the step of selecting the reference image signal and the $(n\text{-}1)$ number of superimposing image signals according to an arbitrary predetermined order of superposition for the n number of image signals; and

the step (c) includes the step of superimposing the $(n\text{-}1)$ number of converted superimposing image signals on the converted reference image

signal according to the order of superposition.

14. A method according to claim 11 further comprising a step of, in the event that at least one of the *n* number of image signals selected by the image selector is an interlaced image signal, converting the at least one interlaced image signal into a non-interlaced image signal.

15. A method according to claim 11 wherein the step (c) includes the *n* number of 2-input image synthesizing steps, each 2-input image synthesizing step including receiving upper-side and lower-side image signals and superimposing the upper-side image signal on the lower-side image signal;

the *n* number of 2-input image synthesizing steps being performed in series in multistage fashion such that the 2-input image synthesizing step of a first stage uses the reference image signal as the lower-side image signal and a first superimposing image signal as the upper-side image signal, while the 2-input image synthesizing step of i^{th} stage, where i is between 2 and n, inclusive, uses an output of the 2-input image synthesizing step of $(i\text{-}1)^{th}$ stage as the lower-side image signal and i^{th} superimposing image signal as the upper-side image signal.

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